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ABSTRACT

The author examines (1) sport as a medium for attitude learning, (2) achievement as an attitude to be modified in girls, and (3) educational sport as a teaching model through which achievement attitudes in elementary school girls can be affected. Sport is seen as an ideal mechanism for attitude change since it has all the characteristics of a social system without the reality consequences. Achievement is recognized as an attitude needing further development in girls due to its value in society and the greater emphasis (in the socialization process) on male achievement rather than female achievement. A teaching model--educational sport--is developed to promote cognitive, affective, and psychomotor learning. Nine specific practical techniques are presented for use in educational sports. A bibliography of 112 citations is appended. (MJB)

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Sport as a developmental experience for girls

(presented at EDA, Baltimore, Md., March 4, 1978)

Sport As A Developmental Experience For Girls

Sport can be structured to provide a developmental experience for girls. To support this thesis, this presentation is divided into the following sections: sport, the ideal medium for attitude learning; achievement as an attitude to be modified in girls; and educational sport, a teaching model through which attitude toward achieving in young girls can be affected.

The acquisition of desirable attitudes and standards has been a stated goal of education since the first publication in 1918 of "The Seven Cardinal Principles". Yet, proof of learnings in the affective domain (attitudes and values) through participation in public education has not been realized. Attitudes are learned; therefore they can be taught. Further, attitudes are learned and communicated within a social situation. Since sport is a microcosm of our society having all the characteristics of a society without the reality consequences, sport appears to be an ideal social situation for the learning of social attitudes. The properties of a social system which are found in sport are rules, boundaries and sanctions within which peers, authorities and subordinates are involved in a task-oriented situation (Loy, 1968 and Luschen, 1968). If attitudes can be modified through the restructuring of sport, sport can serve as a medium for learning social behavior or strengthening positive social behavior in relation to some social learning.

Although sport has the properties of a social system in which social learning may be fostered, evidence indicates that such learning is not developed as the result of mere participation in sport. The conclusion of a number of researchers (Bovyer, 1963; McAfee, 1955; Seymour, 1956; and Whittle, 1961) is that the desirable attitudes and traits of a participant in sport were already a part of one's behavioral characteristics and that one demonstrated them

in one's playing of the sport rather than developing them as the result of participation. Hence, it may be concluded that positive attitudes are not an inevitable outcome of participation in sport.

Sheehan (1965) has found that by structuring the sports situation into a teaching model, cognitive and psychomotor as well as affective learning can occur. This teaching model, educational sport, is based upon the theories of attitude modification of Festinger (1957), Heider (1946), and Lewin (1947). More recently, the techniques of attitude change in the teaching model have been supported by the attitude change theory of McGuire (1969).

The social attitude that was reinforced in a recent study (Murray, 1976) using educational sport was first and second grade girls' attitude toward achieving. The females' attitude toward achievement was selected as the dependent variable because of the importance of achievement in a technological society (ours) and the sexual differences found in achievement motivation. All societies have codes or regulations which are designed to control behavior. These mores take many years for a child to learn and understand and the process of this learning and understanding is socialization. Many of the behaviors learned early through socialization persist throughout one's life. Child training or child rearing is a viable means of socialization. There are subtle differences in the child rearing techniques of boys and girls in the United States, still. Achievement as a personality characteristic is more strongly stressed and reinforced in the training of boys than of girls (Barry, Bacon, and Child, 1957; Miller & Swanson, 1960; Mussen, Conger, and Kagan, 1969; and Sears, Maccoby, and Levin, 1957). Achievement training attempts to orient the boys' behavior towards seeking excellence in performance, while on the distaff side, obedience, nurturance, and responsibility training are performance

objectives. Mussen, Conger, and Kagan (1969) found that in many primary grades there is a wide variety of achievement motivation manifested for boys. When boys do achieve, their behavior is reinforced. Boys achieving in athletics often receive desired love and affection from their parents. These authors also determined that there is a relationship between independence, self-reliance, and motivation to achieve and that these motives are acquired early by boys, and self-reliance and independence are esteemed qualities in America. The personality differences between the sexes are cultural rather than biological in origin, thus they seem to be potentially susceptible to change (Barry, Bacon, and Child, 1957; Dem, 1974; Brim, 1958; Fauls and Smith, 1956; Gagnon, 1966; and Kagan and Moss, 1960).

In our society great emphasis has traditionally and continues to be placed on achievement, i.e., the orientation of behavior towards standards of excellence. Achievement is a value identifiable with Protestantism, Capitalism, and sport, which are three integral areas of our American heritage (Hart, 1972).

If the desire to achieve is a valuble attribute and yet one which has not been stressed for girls, how can the general effects of socialization be structured so that females may internalize positive attitudes towards achievement? An educational sport model provided a means of ascertaining if attitudes toward achievement could be strengthened. Girls in our society are known to have different attitudes from boys towards achievement due largely to differences in child rearing practices. Young girls, then, were ideal subjects for assessing if a positive attitude toward achievement could be strengthened through participation in an educational sport model. In the study (Murray, 1976) mentioned earlier, a relationship between educational sport and attitudes toward achieving was found.

The following are the specific and practical techniques or the methodology used in educational sport, a means of changing attitude of girls at the elementary school level.

1. Focus or selection of the attitudinal target or the social behavior to be strengthened or modified in relation to the social learning target. For the purposes of the study being discussed, the attitudinal target was achievement in elementary aged girls. The sport activities which appear to contain this attitudinal target are those which involve indirect competition (competition against the self).

2. Definition of the attitudinal target (achievement) by the students. Suggested techniques:

   a. "What does the word, achievement, mean to you?"

   b. Definition of achievement in a dictionary.

   c. "I am thinking of a big, long word and it begins with an a_____." It means "to do something well, or to be the best you can be."

   d. "Who is the fastest runner in the class?" "Why?"

   e. "If you would like to be like someone famous, who would you be?"

   "Why would you like to be like _____?"

   "Why is _____ famous?"

   "What did _____ have to do to become famous?"

3. Disadvantages and advantages of the attitudinal target (achievement) were discussed by the class.

4. Class Definitions of attitudinal target (achievement), a consensus.

5. Credible Sources Defined attitudinal target (achievement) for students. Suggested techniques:

   a. Note home to parents, "would you please spend ten minutes with your

child and discuss achievement."

b. Ask teachers about achievement.

c. Ask peers about achievement.

d. Ask siblings about achievement.

6. Synthesize with whole class what credible sources indicated about attitudinal target (achievement).

7. Grand Definition or formal meaning of attitudinal target (achievement) so that all students had an understanding and were in agreement.

8. Try-out the attitudinal target (achievement) in the sport activities. When a student demonstrated achievement, it was noticed and reinforced by the teacher and peers.

9. Summary of attitudinal target (achievement) at conclusion of teaching model by students with teacher. Suggested techniques:

a. "Is it good or bad to achieve?"

b. "Does _____ (credible source or role model) achieve?"

"Is it good if they achieve?"

c. "Is it okay to be good or try your hardest?"

d. "How does one get better:

1. "Listen?"

2. "Try harder?"

3. "Do better than last time?"

4. "Practice?"

5. "Learn from others who do well?"

The teaching model, educational sport, is designed to provide a sport environment through which cognitive, affective and psychomotor learnings can accrue at the elementary school level. The suggested techniques for teaching

affective learnings are supplemental and an adjunct to the regular teaching for psychomotor and cognitive learnings of the physical educator. It is suggested that the previous techniques be employed in an environment differing in nature from the regular physical education environment, the gymnasium, e.g. a classroom; an isolated portion of the gymnasium with chairs and a blackboard; a well-lighted hallway; or a locker room. Thus the students will participate in the psychomotor and cognitive skills of physical education in the gymnasium and the discussions regarding the attitudinal target (affective) in an environment differing from that of the usual gymnasium. The teacher must attempt to teach for transfer. The results of the study (Murray, 1976) mentioned indicated a high relationship between an increase in attitude toward achievement of first and second grade girls and their participation in the attitudinal change model, educational sport.

It could further be assumed that if desirable social attitudes, such as the desire to achieve, can be established through participation in educational sport, cognitive and psychomotor learnings could be facilitated as well. Therefore, the profession of physical education could justifiably claim an individual's learning accomplishments in the three learning domains: cognitive, psychomotor, and affective; thusly supporting the rationale, need, and import of the physical education profession as an integral part of education in our culture. We would be these educators alone who would be able to contribute in these three areas. Sport can be a developmental experience for girls and if we increase girls' attitudes toward achieving we will have more girls participating in sport, to demonstrate their increased desire to excel.

BIBLIOGRAPHY

Ainsworth, M. The development of infant mother attachment. In B. Caldwell & H. Riciuti (Eds.). Child development research. Chicago: The University of Chicago Press, 1973.

Allaman, J.D., Joyce, C.S., & Crandall, V.C. The antecedents of social desirability response tendencies of children and young adults. Child Development. 1972, 43, 1135-1160.

Allport, G.W. The historical background of modern social psychology. In G. Lindzey (Ed.), Handbook of social psychology (Vol. 1). Cambridge, Mass.: Addison-Wesley, 1954, pp. 3-56.

Bandura, A. Principles of behavior modification. New York: Holt, Rinehart and Winston, Inc., 1969.

Baron, R.M. A cognitive model of attitude change. Unpublished doctoral dissertation. New York University, 1963.

Barry, Bacon, & Child. A cross-cultural survey of some sex differences in socialization. Journal of Abnormal and Social Psychology, 1957, 55, 327-332.

Bem, S.L. Sex role adaptability: One consequence of psychological androgyny. Journal of Personality and Social Psychology, 1974.

Blatnik, A.M. An experimental study in selected required college physical education courses to determine the effect of a teaching model structured to produce positive attitudes toward participation in lifetime sports and conditioning activities for physiological and psychological well-being throughout life. Unpublished doctoral dissertation. West Virginia University, Morgantown, 1968.

Block, J. Personality Characteristics associated with father's attitudes toward child-rearing. Child Development, 1955, XXVI, 41-48.

Block, J.; Von der Lippe; & Block, J.H. Sex-role and socialization patterns: Some personality concomitants and environmental antecedents. Journal of Consulting and Clinical Psychology, 1973.

Block, J.H. Conceptions of sex role. American Psychologist, June, 1973, pp. 512-516.

Bovyer, G. Children's concepts of sportsmanship in the fourth, fifth, and sixth grades. Research Quarterly, 1962, 34, 282-87.

Brim, O. Family structure and sex role learning by children. Sociometry, March, 1958.

Campbell, D. T. Social attitudes and other acquired behavioral dispositions. In S. Koch, Psychology: A study of science (Vol. 6). New York: McGraw Hill, 1963, pp. 94-172.

Cartwright, D. & Zander, A. Group dynamics: research and theory (3rd edition). New York: Harper and Row, Publishers, 1968.

Child, I. L., Storm, T., & Veroff, J. Achievement themes in folk tales related to socialization practice. In J. W. Atkinson, Motives in fantasy, action and society. Princeton, N. J.: Van Nostrand, 1958.

Cohen, A. R. Attitude change and social influence. New York: Basic Books, Inc. Publishers, 1964.

Cohen, M. Personal identity and sexual identity. Psychiatry, 1966, (Vol. 29, No. 1).

Crandall, V. C. Reinforcement effects of adult reactions and non-reactions on children's achievement expectations. Child Development, 1963, 34, 335-354.

Crandall, V. C. Personality characteristics and social and achievement behaviors associated with children's social desirability response tendencies. Journal of Personality and Social Psychology, 1966, 4, 477-486.

Crandall, V. C. Achievement behavior in young children. In Willard Hartup (Ed.), The Young Child: Reviews of Research. Washington, D.C., National Association for the Education of Young Children, 1967, pp. 165-185.

Crandall, V. C. Achievement behavior in young children. In B. C. Rosen, H. J. Crockett, & C. Z. Nunn, Achievement in American Society. Cambridge, Mass.: Schenkman Publishing Co., Inc., 1969.

Crandall, V. C. Sex differences in expectancy of intellectual and academic reinforcement. In C. P. Smith (Ed.), Achievement-related motivation in children. New York, Russell Sage Foundation, 1969, pp. 11-45.

Crandall, V. C., Good, S., & Crandall, V. J. Reinforcement effects of adult reactions and nonreactions on children's achievement expectations: A replication study. Child Development, 1964, 35, 485-497.

Crandall, V. C.; Katkovsky, W., Crandall, V. J. Children's beliefs in their own control of reinforcements in intellectual-academic situations. Child Development, 1962.

Crandall, V. J. Parents as identification models and reinforcers of children's achievement behavior. Progress report, NIMH Grant M-2238, 1961. (Mimeographed paper)

Crandall, V. J. Motivational and ability determinants of young children's intellectual achievement behaviors. Child Development, 1962, XXXIII, 643-661.

Crandall, V. J. Achievement. In H. Stevenson (Ed.), Child Psychology. 1963 National Society for the Study of Education Yearbook, Chicago: University of Chicago Press, 1963.

Crandall, V.; Dewey, R.; Katkovsky, W.; & Preston, A. Parents' attitudes and behavior and grade school children's academic achievements. Journal of Genetic Psychology, 1964, 104, 53-66.

Crandall, V. J., Katkovsky, W., & Preston, A. A conceptual formulation for some research on children's achievement development. Child Development, 1960, 31, 787-797.

Crandall, V.; Katkovsky, W.; & Preston, A. Parent behavior and children's achievement development. Paper presented to American Psychological Association, Chicago, 1960.

Crandall, V.; Katkovsky, W.; & Preston, A. Motivational and ability determinants of young children's intellectual achievement behaviors. Child Development, 1962, 32, 643-661.

Crandall, V. J., Preston, A., & Rabson, A. Maternal reactions and the development of independence and achievement behavior in young children. Child Development, 1960, 31, 243-251.

Crandall, V. J., & Preston, A. Verbally expressed needs and overt maternal behaviors. Child Development, 1961, 32, 261-270.

Crandall, V. J., & Rabson, A. Children's repetition choices in an intellectual achievement situation following success and failure. Journal of Genetic Psychology, 1960, 97, 161-168.

Crandall, V. J., & Sinkeldam, C. Children's dependent and achievement behaviors in social situations and their perceptual field dependence. Journal of Personality, 1964, 32, 1-22.

Crandall, V. J., Solomon, D., & Kellaway, R. A comparison of the patterned and non-patterned probability learning of adolescent and early preadolescent school-age children. Journal of Genetic Psychology, 1961, 99, 29-39.

Davidson, I. The effect of a structured teaching model upon cooperative behavior in a sport environment. Unpublished doctoral dissertation, West Virginia University, 1972.

Fauls, L. B. & Smith, W. Sex role learning of five year olds. Journal of Genetic Psychology, 1956.

Feld, S. Need achievement and test anxiety in children and maternal attitudes and behaviors toward independent accomplishments: A longitudinal study. A paper presented to the American Psychological Association, Cincinnati, 1959.

Ferber, M. A. & Huber, J. A. Sex of student and instructor: A study of student bias. American Journal of Sociology, January 1973, 80, 949-963.

Festinger, L. A theory of cognitive dissonance. Stanford, California: Stanford University Press, 1957.

French, E. & Lesser, G. Some characteristics of the achievement motive in women. Journal of Abnormal and Social Psychology, 1964, 68: 119-128.

Friedan, B. The feminine mystique. New York: W. W. Norton and Co., 1963.

Gagnon, J. Sexuality and sex learning in the child. Psychiatry, 1965, Vol. 28, No. 3.

Goldberg, P. Are women prejudiced against women? Transaction, April 1968, 5, 28-30.

Greenwald, A. C., Brock, T. C., & Ostrom, T. M. (Eds.). Psychological foundations of attitudes. New York: Academic Press, 1968.

Heider, F. The psychology of inter-personal relations. New York: John Wiley & Sons, 1958.

Hart, M. M. (Ed.). Sport in the socio-cultural process. Dubuque, Iowa: Wm. C. Brown Company, Publishers, 1972.

Horner, M. S. Sex differences in achievement motivation and performance in competitive and non-competitive situations. Unpublished doctoral dissertation, University of Michigan, 1968.

Horner, M. Femininity and successful achievement: a basic unconsistency. Feminine personality and conflict. Belmont, Brooks/Cole, 1970.

Horner, M. Toward an understanding of achievement related conflicts in women. Journal of Social Issues, 1972, 28 (No. 2), 157-175.

Janis, I. L. & Mann, L. A conflict-theory approach to attitude change and decision making. In A. Greenwald, T. Brock, & T. Ostrom (Eds.), Psychological foundations of attitudes. New York: Academic Press, 1968.

Kagan, J. Sex typing and sex role identity. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child development research (Vol. 1). New York: Russell Sage Foundation, 1964.

Kagen, J. & Moss, H. Stability of passive and dependent behavior from childhood through adulthood. Child Development, 1960, Vol. 31.

Katkovsky, W., Crandall, V., & Preston, A. Parent attitudes toward their personal achievements and toward the achievement behaviors of their children. Journal of Genetic Psychology, 1963.

Katz, D. (Ed.). Special issue on attitude change. Public Opinion Quarterly, 1960, 24, No. 2.

Klineberg, O. Social psychology. New York: Holt, 1954.

Kohlberg, L. A cognitive-developmental analysis of children's Sex role concepts and attitudes. In E. E. Maccoby (Ed.), The development of sex differences. Palo Alto, California: Stanford University Press, 1966.

Komarovsky, M. Cultural contradictions and sex roles. American Journal of Sociology, 1946, 52, 508-516.

Komarovsky, M. Functional analysis of sex roles. American Sociological Review, Aug. 1950.

Levine, A. & Crumrine, J. Women and the fear of success: A problem in replication. American Journal of Sociology, 1975, Vol. 80, No. 4.

Lewin, K. Group decision and social change. In T. M. Newcomb and E. L. Hartley (Eds.), Readings in social psychology. New York: Holt, 1947.

Lipinski, B. G. Sex-role conflict and achievement motivation in college women. Unpublished doctor's thesis. Cincinnati, Ohio: University of Cincinnati, 1965. (DA 26: 4077)

Lipman, B. J. How ideology shapes women's lives. Scientific American, 1972, 226, 34-42.

Loy, John W. The nature of sport: a definitional effort. Quest, 1968, X, 1-15.

Loy, J. W. & Kenyon, G. S. Sport, culture, and society. The MacMillan Company, 1969.

Luschen, G. The sociology of sport. The Hague Paris: Mouton E. Co., 1968.

Lynn, D. B. A role on sex differences in the development of masculine and feminine identification. Psychological Review, 1959, 66, 126-135.

Maccoby, E. The development of sex differences. Stanford, California: Stanford University Press, 1966.

Maccoby, E. & Jacklin, C. The psychology of sex differences. Stanford, California: Stanford University Press, 1974.

McAfee, R. Sportsmanship attitudes of sixth, seventh, and eighth grade boys. Research Quarterly, 1955, 26: 120-21.

McClelland, D. C. Some social consequences of achievement motivation. In M. R. Jones (Ed.), Nebraska Symposium on Motivation (Vol. III). Lincoln, Neb.: University of Nebraska Press, 1955, pp. 41-65.

McClelland, D. C. The achieving society. Princeton, N.J.: Van Nostrand Company, Inc., 1961.

McClelland, D. C., Atkinson, C. R. & Lowell, E. The achievement motive. New York: Appleton-Century-Crofts, 1953.

McClelland, D. C. & Friedman, G. A. A cross-cultural study of the relationship between child-training practices and achievement motivation, appearing in folk tales. In G. E. Swanson, T. M. Newcomb, and E. L. Hartley (Eds.), Readings in Social Psychology, New York: Holt, 1952.

McGuire, W. J. The nature of attitudes and attitude change. In G. Lindzey and E. Aronson (Eds.), The handbook of social psychology. Cambridge, Mass.: Addison-Wesley, 1969, pp. 136-314.

Metcalf, R. A. An analysis of the components of a philosophical definition of sport and their relationship to the modification of social attitudes. Unpublished doctoral dissertation. West Virginia University, 1973.

Miller, D. R. & Swanson, G. E. Inner conflict and defenses. New York: Henry Holt and Company, 1960.

Milton, G. A. Five studies of the relation between sex-role identification and achievement in problem solving. Yale University Technical Report No. 3, Department of Industrial Administration and Department of Psychology, December 1958.

Minuchin, P. P. Sex role concepts and sex typing in childhood as a function of school and home environments. Child Development, 1956, 36, 1033-1048.

Moulton, R. W. Effects of success and failure on level of aspiration as related to achievement motives. Journal of Personality and Social Psychology, 1965, 1, 399-406.

Murray, M.C. The relationship of attitudes toward achievement of elementary school girls and participation in educational sport. Unpublished doctoral dissertation, University of Connecticut, Storrs, 1976.

Mussen, P. H., Conger, J.,& Kagan, J. Child development and personality. New York: Harper and Row, Publishers, 1969.

Mussen, P. H. & Rosenzweig, M. R. (Eds.). Annual Review of Psychology, 1972, p. 23.

Newcomb, T. M. Attitude development as a function of reference groups: The Bennington study. In J. M. Seidman (Ed.), The adolescent, 1960, pp. 692-706.

Osgood, C. E. Cognitive dynamics in the conduct of human affairs. Public Opinion Quarterly, 1960, 24, 341-365.

Roberts, J. M. & Sutton-Smith, B. Child training and game involvement. Ethnology, 1962, 1, 166-185.

Rokeach, M. Attitude change and behavioral change. Public Opinion Quarterly, 1967, 30, 529-550.

Rokeach, M. Beliefs, attitudes and values. San Francisco: Jossey-Bass, 1968.

Rosen, B. C. The achievement syndrome: A psychocultural dimension of social stratification. American Sociological Review, 1956, 21, 203-211.

Rosen, B. C., Crockett, H. J., & Nunn, C. Z. Achievement in American society. Cambridge, Mass.: Schenkman Publishing Company, Inc., 1969.

Rosenberg, M. J. & Abelson, R. P. An analysis of cognitive balancing. In C. I. Hovland & M. J. Rosenberg (Eds.), Attitude organization and change. New Haven, Conn.: Yale University Press, 1960, pp. 112-163.

Rosen, B., & D'Andrade, R. The psychosexual origins of achievement motivation. Sociometry, 1959, 22, 185-218.

Sage, G. H. (Ed.). Sport and American society: Selected readings. Reading, Mass.: Addison Wesley Publishing Company, 1974.

Sears, R., Maccoby, E., & Levin, H. Patterns of child rearing. Evanston, Illinois: Row, Peterson and Company, 1957.

Seymour, E. W. Comparative study of certain behavior characteristics of participant and non-participant boys in little league baseball. Research Quarterly, 1956, 27, 338-46.

Shaw, M. E. & Wright, J. M. Scales for measurement attitudes. New York: McGraw-Hill, 1967.

Sheehan, T. J. The construction and testing of a teaching-model for attitude formation and change through physical education. Unpublished doctoral dissertation. Ohio State University, Columbus, 1965.

Sheehan, T. J. & Alsop, W. L. Educational sport. JOPHER, 1972, 43, (5), 41-45.

Sherif, C. W. Females in the competitive process. In D. V. Harris (Ed.), Women and Sport: A National Research Conference. Pennsylvania State University, HPER Series No. 2, 1972.

Sherif, C. W., Sherif, M., & Nevergall, R. E. Attitude and attitude change. Philadelphia: Saunders, 1965.

Smith, C. P. (Ed.), Achievement related motives in children. New York: Russell Sage Foundation, 1969.

Stein, A. H. The effects of sex role standards for achievement and sex role preference on three determinants of achievement motivation. Developmental Psychology, 1971, 4, 219-231.

Stein, A. H.; Pohly, S. R.; & Mueller, E. The influence of masculine, feminine, and neutral tasks on children's achievement behavior, expectancies of success and attainment values. Child Development, 1971, 42, 195-207.

Sutton-Smith, B., Rosenberg, J.M., & Kozelka, R. M. Game involvement in adults. Journal of Social Psychology, 1963, 60, 15-30.

Sutton-Smith, B., Rosenberg, B. G., Morgan, E. F. Development of sex differences in play choices during preadolescence. Child Development, March 1963.

Sutton-Smith, B. & Roberts, J. M. The cross-cultural and psychological study of games. In G. Lüschen (Ed.), The cross cultural analysis of sport and games. Champaign, Illinois: Stripes Publishing Co., 1970, pp. 101-108.

Triandis, H. C. Attitude and attitude change. New York: John Wiley and Sons, Inc., 1971.

Veroff, J. Social comparison and the development of achievement motivation. In C. P. Smith (Ed.), Achievement related motives in children. New York: Russell Sage Foundation, 1969, pp. 46-101.

Waples, D. L. A comparative study of attitude modification in selected sport and games. Unpublished doctoral dissertation, West Virginia University, 1972.

Whittle, M. D. Effects of elementary school physical education upon aspects of physical, motor, personality development. Research Quarterly, 1961, 32, 249-60.